

Please type this information inside this box



TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number Of Pages In This Submission

10 + 43
References

Application Number

10/085,885

Filing Date

February 27, 2002

First Named Inventor

Anthony J. TICKNOR

Group Art Unit

2874

Examiner Name

To Be Assigned

Attorney Docket No.

373722002400 (Client Reference: A063)

RECEIVED
MAY 16 2002
TECHNOLOGY CENTER

ENCLOSURES (check all that apply)

☐ Fee Transmittal Form

☐ Fee Attached

☐ Amendment / Reply

☐ After Final

☐ Affidavits/declarations

☐ Extension of Time Request

☐ Express Abandonment Request

☒ Information Disclosure Statement - 3
pages

☐ Certified Copy of Priority Document(s)

☐ Response to Missing Parts/
Incomplete Application

☐ Response to Missing Parts
under 37 CFR 1.52 or 1.53

☐ Assignment Papers
(for an Application)

☐ Drawing(s)

☐ Licensing-related Papers

☐ Petition

☐ Petition to Convert to a
Provisional Application

☐ Power of Attorney, Revocation
Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD, Number of CD(s) _____

☐ After Allowance Communication to
Group

☐ Appeal Communication to Board of
Appeals and Interferences

☐ Appeal Communication to Group
(Appeal Notice, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☒ Other Enclosure(s) (please identify
below):

1. Form PTO-1449 (w/copy) 6 pages
2. Forty-three References
3. Two Return Receipt Postcards

Remarks

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm

Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304-1018

or

Individual Name

Charles D. Holland, Reg. No. 35,196

Signature

Date

May 8, 2002

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on May 8, 2002.

Kerry Keegan

Burden Hours Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



PATENT
Docket No. 373722002400
Client Reference: A063

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:
Assistant Commissioner for Patents, Washington, D.C. 20231, on May 8, 2002.


Kerry Keehan

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Anthony J. TICKNOR et al.

Serial No.: 10/085,885

Filing Date: February 27, 2002

For: MICROFLUIDIC CONTROL FOR
WAVEGUIDE OPTICAL SWITCHES,
VARIABLE ATTENUATORS, AND
OTHER OPTICAL DEVICES

Examiner: To Be Assigned

Group Art Unit: 2874

RECEIVED
MAY 16 2002
TECHNOLOGY CENTER 2800

INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☒ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of is enclosed.
 - ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

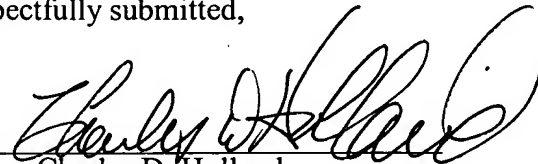
The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 373722002400. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: May 8, 2002

Respectfully submitted,

By:



Charles D. Holland
Registration No. 35,196
Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5832
Facsimile: (650) 494-0792

Form PTO-1449

Docket Number 373722002400
Client Reference: A063

Application Number 10/085,885

INFORMATION DISCLOSURE CITATION
ON AN APPLICATION

Applicant

Anthony J. TICKNOR et al.

Filing Date February 27, 2002

Group Art Unit 2874

Mailing Date May 8, 2002



(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	04/22/1986	4,583,824	Lea			
	2.	12/06/1988	4,789,228	Le Pesant et al.			
	3.	01/29/1991	4,988,157	Jackel et al.			
	4.	12/16/1997	5,699,462	Fouquet et al.			
	5.	07/13/1999	5,921,678	Desai et al.			
	6.	09/21/1999	5,956,005	Sheridon			
	7.	09/28/1999	5,960,131	Fouquet et al.			
	8.	11/02/1999	5,978,527	Donald			
	9.	04/25/2000	6,055,344	Fouquet et al.			
	10.	06/06/2000	6,072,924	Sato et al.			
	11.	01/09/2001	6,170,981	Regnier et al.			
	12.	04/03/2001	6,210,128	Rife et al.			
	13.	05/15/2001	6,231,737	Ramsey et al.			
	14.	09/11/2001	6,287,520	Parce et al.			
	15.	10/23/2001	6,306,659	Parce et al.			
	16.	12/18/2001	6,331,073	Chung			
	17.	12/18/2001	6,331,439	Cherukuri et al.			
	18.	01/01/2002	6,334,676	Kaszczuk et al.			
	19.	01/08/2002	6,337,740	Parce			
	20.	01/29/2002	6,342,142	Ramsey			

FOREIGN PATENT DOCUMENTS

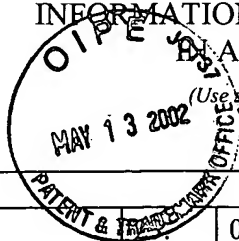
Examiner Initials	Ref. No.	Date			Class	Subclass	Translation YES NO
	21.	06/24/1994	JP 06-175052	Japan			
	22.	04/07/1995	JP 07-092405	Japan			

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449		Docket Number 373722002400 Client Reference: A063	Application Number 10/085,885
INFORMATION DISCLOSURE CITATION BY AN APPLICATION (Use several sheets if necessary)		Applicant Anthony J. TICKNOR et al.	
		Filing Date February 27, 2002	Group Art Unit 2874
		Mailing Date May 8, 2002	



	03/08/1996	JP 08-062645	Japan				
24.	12/27/2001	WO 01/98759	WIPO			Derwent Abstract	

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	25.	Patent Abstracts of Japan for Japanese patent no. 06-175052, published on June 24, 1994 (2 pages, abstract only).
	26.	Patent Abstracts of Japan for Japanese patent no. 07-092405, published on April 07, 1995 (1 page, abstract only).
	27.	Patent Abstracts of Japan for Japanese patent no. 08-062645, published on March 08, 1996 (1 page, abstract only).
	28.	Beni, G. and Hackwood, S. (1981). "Electro-Wetting Displays," <i>Appl. Phys. Lett.</i> 38(4): 207-209.
	29.	Jackel, J. L. et al. (1983). "Electro Wetting Switch for Multimode Optical Fibers," <i>Applied Optics</i> 22(11): 1765-1770.
	30.	Jang, J. and Lee, S. S. (2000). "Theoretical and Experimental Study of MHD (Magnetohydrodynamic Micropump)," <i>Sensors and Actuators</i> 80:84-89.
	31.	Krijnen, G. J. M. et al. (1999). "Optical Devices Based on Fluidic Controlled Two-Mode Interference," <i>J. Micromech. Microeng.</i> 9:203-205.
	32.	Lea, M. C. (1981). "Optical Modulators Based on Electrocapillarity," <i>Optic Letters</i> 6(8):395397.
	33.	Lee, J. and Kim, C-J (2000). "Surface-Tension-Driven Microactuation Based on Continuous Electrowetting," <i>Journal of Microelectromechanical Systems</i> 9(2):171-180.
	34.	Lemoff, A. V. and Lee, A. P. (2000). "An AC Magnetohydrodynamic Micropump," <i>Sensors and Actuators</i> B63:178-185.
	35.	Makihara, M. et al. (1999). "Micromechanical Optical Switches Based on Thermocapillary Integrated in Waveguide Substrate," <i>Journal of Lightwave Technology</i> 17(1):14-18.
	36.	Pollack, M. G. and Fair, R. B. (2000). "Electrowetting-Based Actuation of Liquid Dropets for Microfluidic Applications," <i>Applied Physics Letters</i> 77(11):1725-1726.
	37.	Prins, M. W. J. et al. (2001). "Fluid Control in Multichannel Structures by Electrocapillary Pressure," <i>Science</i> 291:277-280.
	38.	Richter, A. et al. (1991). "Electrohydrodynamic Pumping and Flow Measurement," <i>IEEE PROC. MEMS.</i> , New York, USA, pp. 271-276.
	39.	Richter, A. and Hermann, S. (1990). "An Electohydrodynamic Micropump," <i>IEEE PROC. MEMS.</i> , New York, USA, pp. 99-104.

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 373722002400
Client Reference: A063

Application Number 10/085,885

Applicant

Anthony J. TICKNOR et al.

Filing Date February 27, 2002

Group Art Unit 2874

Mailing Date May 8, 2002

40. Ross, D. and Hitchison, J. S. (2001). "Microfluidic Optical Switches Using Two Non-Mixing Fluids in a Mach Zehnder Interferometer," OECC/IOOC 2001 Conferences Incorporating ACOFT, Monday July 2, Thursday 5, July, 2001, 2 pages.
41. Sakata, T. et al. (2001). "Improvement of Switching Time in a Thermocapillarity Optical Switch," *Journal of Lightwave Technology* 19(7):1023-1027.
42. Sato, M. (1994). "Electrocapillarity Optical Switch," *IEICE Trans. Commun.* E77-B(2):197-203.
43. Vallet, M. et al. (1996). "Electrowetting of Water and Aqueous Solutions on Poly(Ethylene Terephthalate) Insulating Films," *Polymer* 37(12):2465-2470.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.